

Exhibit 1

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:


SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

 Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium

Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, “the formulation of pentobarbital is relatively straightforward and can be carried out by” a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons’ Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma’s Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

Q Do you know where to acquire it?

A Yes.

Q Would you be able to acquire it?

A I would have to ask Dr. Sherman or Dr. Block.

2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Brenda Andrew, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 27, 2021
Date


Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.


* * *

I, Ronson H. Dush, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021

Date

Dated: May 3, 2021


Signature

s/ Michael W. Lieberman

Michael W. Lieberman, OBA # 32694

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And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, JELANZKE CHANDLER, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date


Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA**

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

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Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)



Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹



Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).



Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).



Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium

Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, “the formulation of pentobarbital is relatively straightforward and can be carried out by” a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons’ Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma’s Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

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2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

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The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, ROBERT S. JACKSON, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 29, 2021
Date


Signature AS NEXT FRIEND
TO BEN COLE

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
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RANDY CHANDLER, <i>et al.</i> ,)	
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**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

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* * *

I, Carlos Cueta Rodriguez declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26 2021
Date

Carlos Cueta Rodriguez
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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WESTERN DISTRICT OF OKLAHOMA**

RICHARD GLOSSIP, <i>et al.</i> ,)	
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Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
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There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, “the formulation of pentobarbital is relatively straightforward and can be carried out by” a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons’ Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma’s Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

Q Do you know where to acquire it?

A Yes.

Q Would you be able to acquire it?

A I would have to ask Dr. Sherman or Dr. Block.

2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Scott Erzenber, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date


Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

R. G.

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

R. G.

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company

Alluvium Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

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Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

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2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware

that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona's lethal injection protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch "what transpires in Arizona" but would "stay the course" and continue to use Oklahoma's current Execution Protocol. *Id.* at 182-86.

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And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma's efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma's Execution Protocol. *See* sources cited above.

* * *

I, Richard Orlowski, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 30, 2021

Date


Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

Michael W. Lieberman, OBA # 32694

Emma V. Rolls, OBA # 18820

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

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Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

C. D. Jr.

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

C. D. Jr.

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

C. D. Jr.

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

C. D. Jr.

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

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The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

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The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

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The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Clarence Goode Jr., declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date

C. Goode Jr.
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA**

RICHARD GLOSSIP, <i>et al.</i> ,)	
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Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
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**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
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Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials **Alternative Pled (Compl. ¶ 114)**

This space intentionally left blank.

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I respectfully decline to identify an alternative execution method.¹ Suggesting a method for how the State will kill me would make me complicit in my own death in a way that I believe would be akin to suicide or assisting my suicide. I cannot do so on moral, ethical and/or religious grounds. Additionally, no other constitutional right is conditioned on an individual identifying a constitutional way for the government to act and I believe the requirement to do so here is a perversion of justice.

D.G.

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital:

(1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience

who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, "the formulation of pentobarbital is relatively straightforward and can be carried out by" a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons' Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma's Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

Q Do you know where to acquire it?

A Yes.

Q Would you be able to acquire it?

A I would have to ask Dr. Sherman or Dr. Block.

2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort

to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas's supply of pentobarbital was publicly known, he did not contact Texas's pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona's lethal injection protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch "what transpires in Arizona" but would "stay the course" and continue to use Oklahoma's current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC's only attempts to identify the federal government's source of pentobarbital included calling the "main line" at USP Terre Haute "three times," each time being transferred to the "public information officer," and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40

of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma's efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma's Execution Protocol. *See* sources cited above.

* * *

I, DONALD GRANT, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date

DONALD GRANT
Signature

Dated: May 3, 2021

s/ Michael W Lieberman
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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiffs' Initials

Alternative Pled (Compl. ¶ 114)

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

W6

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

W6

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

W6

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium

Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

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Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

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2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Wendell Grissom, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date

Wendell Grissom
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

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Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

P.H.

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

P.H.

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

P.H.

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

P.H.

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

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The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

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Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

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As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Phillip Hancock, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 20, 2021
Date

Phillip Hancock
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

G. H.

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium

Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, “the formulation of pentobarbital is relatively straightforward and can be carried out by” a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons’ Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma’s Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

Q Do you know where to acquire it?

A Yes.

Q Would you be able to acquire it?

A I would have to ask Dr. Sherman or Dr. Block.

2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, George Hanson, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 29, 2021
Date

George Hanson
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
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Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

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Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

This space intentionally left blank.

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This space intentionally left blank.

This space intentionally left blank.

G. H.

I respectfully decline to identify an alternative execution method.¹ Suggesting a method for how the State will kill me would make me complicit in my own death in a way that I believe would be akin to suicide or assisting my suicide. I cannot do so on moral, ethical and/or religious grounds. Additionally, no other constitutional right is conditioned on an individual identifying a constitutional way for the government to act and I believe the requirement to do so here is a perversion of justice.

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital:

(1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

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Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

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A No. That's not what I was engaged to do.

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of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma's efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma's Execution Protocol. *See* sources cited above.

* * *

I, George Hanson, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 29, 2021
Date

George Hanson
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
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Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
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RANDY CHANDLER, <i>et al.</i> ,)	
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**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
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Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

M H Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

M H Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

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There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, “the formulation of pentobarbital is relatively straightforward and can be carried out by” a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons’ Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma’s Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

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As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Marlon Harmon, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date


Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

REJ

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

REJ

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium

Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, “the formulation of pentobarbital is relatively straightforward and can be carried out by” a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons’ Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma’s Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

Q Do you know where to acquire it?

A Yes.

Q Would you be able to acquire it?

A I would have to ask Dr. Sherman or Dr. Block.

2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Raymond E Johnson, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date

Raymond E Johnson
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
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**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

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Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

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I respectfully decline to identify an alternative execution method.¹ Suggesting a method for how the State will kill me would make me complicit in my own death in a way that I believe would be akin to suicide or assisting my suicide. I cannot do so on moral, ethical and/or religious grounds. Additionally, no other constitutional right is conditioned on an individual identifying a constitutional way for the government to act and I believe the requirement to do so here is a perversion of justice.



Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital:

(1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

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who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

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to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas's supply of pentobarbital was publicly known, he did not contact Texas's pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona's lethal injection protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch "what transpires in Arizona" but would "stay the course" and continue to use Oklahoma's current Execution Protocol. *Id.* at 182-86.

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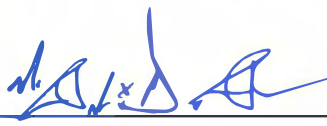
of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma's efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma's Execution Protocol. *See* sources cited above.

* * *

I, Mr. Joshua D. Jones, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 28, 2021
Date


Signature

Dated: May 3, 2021

s/ Michael W. Lieberman
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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
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**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
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Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

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Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

ms

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

ms

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

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The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium

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There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, “the formulation of pentobarbital is relatively straightforward and can be carried out by” a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons’ Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma’s Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

Q Do you know where to acquire it?

A Yes.

Q Would you be able to acquire it?

A I would have to ask Dr. Sherman or Dr. Block.

2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Michael Little JD, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date

Michael Little JD
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA**

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

<u>/s/ R.R.M. (by /s/ David Autry, next friend)</u>	Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a). ¹
---	--

<u>/s/ R.R.M. (by /s/ David Autry, next friend)</u>	Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).
---	---

<u>/s/ R.R.M. (by /s/ David Autry, next friend)</u>	Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).
---	---

<u>/s/ R.R.M. (by /s/ David Autry, next friend)</u>	Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).
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Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

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Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium

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Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

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As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

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And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, /s/ Ricky Ray Malone (by /s/ David Autry, next friend), declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 29, 2021

Date

/s/ Ricky Ray Malone (by /s/ David Autry, next friend)

Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

Michael W. Lieberman, OBA # 32694

Emma V. Rolls, OBA # 18820

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
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RANDY CHANDLER, <i>et al.</i> ,)	
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**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

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Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

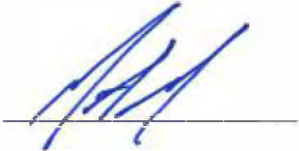
Plaintiff's Initials Alternative Pled (Compl. ¶ 114)



Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).



Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

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The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, *Nica A. Antunez*, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26 2021
Date

[Signature]
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

ABM

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

ABM

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

ABM

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

ABM

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium

Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, “the formulation of pentobarbital is relatively straightforward and can be carried out by” a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons’ Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma’s Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

Q Do you know where to acquire it?

A Yes.

Q Would you be able to acquire it?

A I would have to ask Dr. Sherman or Dr. Block.

2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Alfred B. Mitchell, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date

Alfred B. Mitchell
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
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Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
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RANDY CHANDLER, <i>et al.</i> ,)	
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**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

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Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

JOP

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

JOP

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

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The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, James D. Pavatt, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date

James D. Pavatt
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA**

RICHARD GLOSSIP, <i>et al.</i> ,)	
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Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
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Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).



Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

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As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

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Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Richard Zarem, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 23, 2021

Date


Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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Emma V. Rolls, OBA # 18820

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

Plaintiff's Initials **Alternative Pled (Compl. ¶ 114)**

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium

Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, “the formulation of pentobarbital is relatively straightforward and can be carried out by” a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons’ Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma’s Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

Q Do you know where to acquire it?

A Yes.

Q Would you be able to acquire it?

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2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

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The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, , declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date


Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
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Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
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RANDY CHANDLER, <i>et al.</i> ,)	
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**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

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Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

M.D.S

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

M.D.S

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

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Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

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The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Michael Smith, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26, 2021
Date

Michael Smith
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
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Plaintiffs,)	
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vs.)	Case No. 5:14-CV-665-F
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Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

KU Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

KU Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

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Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Kevin Underwood, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

April 26 2021
Date

K. Underwood
Signature

Dated: May 3, 2021

s/ Michael W. Lieberman

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COUNSEL FOR PHILLIP HANCOCK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

RICHARD GLOSSIP, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
vs.	)	Case No. 5:14-CV-665-F
)	
RANDY CHANDLER, <i>et al.</i> ,)	
)	
Defendants.)	

**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

Tw

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

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The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

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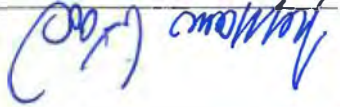
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Dated: May 3, 2021

Date

April 30, 2021

Signature



relied on the sources cited above.

and correct, to the best of my knowledge. As to those facts not known personally to me, I have

I, TERMAINE WOOD, declare under penalty of perjury that the foregoing is true

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COUNSEL FOR PHILLIP HANCOCK

Plaintiff's Initials

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* * *

I, Richard Fairchild, declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

May 5, 2021
Date

Richard Fairchild
Signature

Dated: May 6, 2021

s/ Michael W. Lieberman

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**PLAINTIFFS' SUPPLEMENTAL RESPONSES AND OBJECTIONS
TO DEFENDANTS' INTERROGATORIES NOS. 15 & 16**

Plaintiffs, by and through their attorneys, and pursuant to Rule 33 of the Federal Rules of Civil Procedure, the Local Rules of the Western District of Oklahoma (the "Local Rules"), and the Court's April 2, 2021, Order, supplement their October 8, 2020, Responses and Objections to Defendants' Interrogatories Nos. 15 & 16 as follows:

SUPPLEMENTAL RESPONSES TO INTERROGATORIES 15 & 16

Subject to, and without waiver of, the General and Specific Responses and Objections set forth in Plaintiffs October 8, 2020, Responses and Objections to Defendants' Interrogatories, Requests for Admission, and Requests for Production, Plaintiffs responds as follows:

Interrogatory No. 15: For each Plaintiff, identify which pled alternatives in ¶ 114 are being pled on behalf of that particular Plaintiff.

Supplemental Response: Subject to foregoing objections, each Plaintiff responds individually as follows as indicated by that Plaintiff's signature verifying these Interrogatories and that Plaintiff's initials below:

Plaintiff's Initials Alternative Pled (Compl. ¶ 114)

BR

Execution by a single dose of FDA-approved pentobarbital or sodium pentothal (thiopental) as provided by Charts A and B of the Execution Protocol as described fully in Plaintiffs' Third Amended Complaint paragraph 114(a).¹

BR

Execution by a single dose of compounded pentobarbital or sodium pentothal (thiopental) as described fully in Plaintiffs' Third Amended Complaint paragraph 114(b).

SR

Execution by a single dose of 40 milligrams of FDA-approved midazolam and potassium chloride, as described fully in Plaintiffs' Third Amended Complaint paragraph 114(c).

SR

Execution by firing squad as described fully in Plaintiffs' Third Amended Complaint paragraph 114(d).

Interrogatory No. 16: Identify where and from whom the State of Oklahoma can obtain pentobarbital or sodium pentothal for use in an execution to be held within the State, as pled in ¶ 114 of your Complaint.

Supplemental Response: Subject to foregoing objections, Plaintiffs respond as follows:

The State of Oklahoma has at least five alternative potential sources for pentobarbital: (1) synthesis by a properly licensed chemistry lab; (2) Defendants' technical expert Dr. Buffington who testified that he is aware of a source or sources; (3) the source(s) for the numerous other states that carry out executions using pentobarbital; (4) the source(s) for the federal government, which has recently carried out 13 executions using pentobarbital; or (5) one of the more than 900 pharmacies licensed by the State of Oklahoma and not contacted by the ODOC in an effort to find pentobarbital.

¹ Relevant excerpts of Plaintiffs' Third Amended Complaint are attached hereto as Exhibit A.

The State of Oklahoma can have pentothal (thiopental) or pentobarbital synthesized by a properly licensed and regulated commercial or research laboratory. Preparation, or synthesis, of sodium pentothal or pentobarbital sodium, the execution chemicals listed in Charts A and B of Attachment D to Oklahoma's Execution Protocol, is feasible, available, and readily implemented. *See generally* January 8, 2021, Expert Opinion of David H. Sherman, Ph.D., attached hereto as Exhibit B ("Sherman Expert Report"). The method for synthesis of both sodium pentothal or pentobarbital sodium is efficient, scalable, and straightforward. Sherman Expert Report ¶ 25. It involves alkylation of malonic ester followed by cyclization with thiourea in the presence of sodium ethoxide. Because the method for synthesis of sodium pentothal and pentobarbital sodium is scalable, the execution chemicals can be made in the quantities called for in the Execution Protocol, and increased as needed. Sherman Expert Report ¶ 25. The reactions necessary to synthesize the execution chemicals require reactants (ingredients) that are commercially available, and standard laboratory equipment and glassware that is either readily available in most laboratories or easy to obtain. Sherman Expert Report ¶¶ 25, 59-62, 69, 83.

Additionally, the skill needed to synthesize sodium pentothal and pentobarbital sodium is relatively low. Sherman Expert Report ¶¶ 26, 47. A typical person of skill in the art capable of synthesizing thiopental or pentobarbital is an undergraduate student with one to two years of laboratory experience in synthetic chemistry. Undergraduate students with this level of experience who have worked in Dr. Sherman's research laboratory at the University of Michigan over the past 17 years have the skills to conduct this level of synthetic chemistry. Sherman Expert Report ¶¶ 26, 47. Synthetic work requiring the same level of skills to make pentobarbital or pentobarbital sodium has also been conducted by persons at Dr. Sherman's start-up company Alluvium

Biosciences, Inc., by undergraduate students with one to two years of laboratory experience. Sherman Expert Report ¶¶ 26, 47.

There are both university and private commercial laboratories within Oklahoma capable of performing the synthesis of both execution chemicals that are available commercially for hire, including the University of Oklahoma. Sherman Expert Report ¶¶ 27, 88-94. These labs have the capability to perform the synthesis and the requisite post-synthesis testing necessary to provide pentobarbital sodium or sodium pentothal in the quantities required by the Execution Protocol. Sherman Expert Report ¶¶ 27, 88-94. Following synthesis of pentobarbital sodium or sodium pentothal by a chemist, “the formulation of pentobarbital is relatively straightforward and can be carried out by” a compounding pharmacist licensed by the state and with appropriate experience. *See* January 11, 2021, Expert Opinion of Dr. Lawrence H. Block, Ph.D., FAPRS, FAAPS, attached hereto as Exhibit C; *see also* September 16, 2020, Declaration of Peter W. Swaan, Ph.D., filed in *In the Matter of the Federal Bureau of Prisons' Execution Protocol Cases*, Case No. 19-mc-0145, (D. Col.) and materials attached to and cited therein, attached to the Expert Opinion of Dr. Block; 2/10/21 Buffington Dep. Tr. at 117-119. ODOC Director Crow testified that ODOC had made no efforts to obtain synthesis of the active pharmaceutical ingredient pentobarbital used in Oklahoma’s Execution Protocol. *See* 11/12/2020 Crow Dep. Tr. at 256-258.

Alternatively, the State of Oklahoma can likely also obtain pentobarbital with ordinary transactional effort through its expert, Dr. Daniel E. Buffington. Dr. Buffington testified that he knows where to acquire pentobarbital:

Q Did the DOC ask you if you knew where you could acquire the active pharmaceutical ingredient to compound pentobarbital?

A No. That's not what I was engaged to do.

Q Do you know where to acquire it?

A Yes.

Q Would you be able to acquire it?

A I would have to ask Dr. Sherman or Dr. Block.

2/10/21 Buffington Dep. Tr. at 122:15-20 (excerpts attached hereto as Exhibit D). Dr. Buffington also testified that if he had the facilities to do so, he or any pharmacist or pharmacologist could compound pentobarbital. *Id.* at 117-119. Dr. Buffington also acknowledged that he believes there are pharmacies in the United States that would compound pentobarbital for lethal injections, and that he had “discussions with colleagues in conferences and they said they would compound pentobarbital for departments of corrections.” *Id.* at 120.

As an additional alternative, the State of Oklahoma can obtain pentobarbital from one or more of the same sources used by other states that have carried out lethal injection just in the last two years using pentobarbital, including Texas, Georgia, Missouri, and South Dakota. Arizona also recently announced that the “Attorney General’s Office has found a lawful supplier of pentobarbital that can make the drug available to our state.” Aug. 20, 2020, Ltr. from Az. AG Brnovich to Gov. Ducey, attached hereto as Exhibit E. Despite this, Mr. Bentley of the Oklahoma Department of Corrections (ODOC), the individual tasked with identifying a source of pentobarbital by ODOC Director Scott Crow testified that he did not contact any states in an effort to locate a source of pentobarbital. *See* 12/30/2020 Bentley Dep. Tr. at 88 (excerpts attached hereto as Exhibit F). Additionally, Mr. Bentley testified that despite the fact that Texas’s supply of pentobarbital was publicly known, he did not contact Texas’s pentobarbital supplier. *Id.* at 83-84. ODOC Director Crow testified that he was not even aware that South Dakota, Ohio, or Georgia used pentobarbital to execute prisoners using a single drug protocol. 11/12/20 Crow Dep. Tr. at 112. ODOC Director Crow further testified that he was not aware that Arizona announced in October 2020 that they had found a source of pentobarbital for use in Arizona’s lethal injection

protocol. 11/17/2020 Crow Dep. Tr. 181-82. Once he was made aware, Director Crow testified that ODOC would watch “what transpires in Arizona” but would “stay the course” and continue to use Oklahoma’s current Execution Protocol. *Id.* at 182-86.

Another alternative source for pentobarbital is the source(s) used by the federal government to carry out its lethal injection executions. The federal government used pentobarbital in thirteen executions conducted from July 2020 through mid-January 2021. The ODOC’s only attempts to identify the federal government’s source of pentobarbital included calling the “main line” at USP Terre Haute “three times,” each time being transferred to the “public information officer,” and each of the three times leaving a message without receiving a call back. 12/30/2020 Bentley Dep. Tr. at 71.

And finally, still another alternative is for the State of Oklahoma to obtain pentobarbital from one or more of almost 1,000 licensed Oklahoma pharmacies that the State of Oklahoma has not yet contacted in an effort to obtain pentobarbital. ODOC requested and received a list of all active retail pharmacies in the State of Oklahoma. 12/30/2020 Bentley Dep. Tr. at 65. The list included almost 1,000 pharmacies. Mr. Bentley on behalf of ODOC contacted approximately 40 of those pharmacies, or approximately 4%, in an effort to identify a source for pentobarbital. *Id.* at 84-85, 89-90.

The State of Oklahoma’s efforts to obtain pentothal and pentobarbital sodium from any of the above-described five potential sources have been inadequate to conclude that either sodium pentothal or pentobarbital sodium are unavailable to the State of Oklahoma for purposes of carrying out Oklahoma’s Execution Protocol. *See* sources cited above.

* * *

I, Sue Ryder (James Ryder) declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. As to those facts not known personally to me, I have relied on the sources cited above.

May 3, 2021
Date _____

Sue Ryder
Signature _____

Dated: May 6, 2021

s/ Michael W. Lieberman

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